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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/217,873 12/21/98 RAPAICH

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EXAMINER

NATNAEL, P

ART UNIT

PAPER NUMBER

2714

DATE MAILED:

08/16/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/217,873**

Applicant(s)  
**Mark Rapaich**

Examiner  
**Paulos Natnael**

Group Art Unit  
**2714**



☒ Responsive to communication(s) filed on Jun 2, 2000.

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-11 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-11 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### **DETAILED ACTION**

1. 35 U.S.C. 102 rejections based on prior art references Anderson et al., (6,028,611) and Eglit (5,734,362) have been withdrawn. Arguments are considered persuasive, given the amended language in claims.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1(as amended)2(as amended),3-5,6(as amended),7(as amended),8,9, and 10(as amended)** are rejected under 35 U.S.C. 102(b) as being anticipated by Hannah, U.S. Pat. No. 5,568,192 for the reasons record.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eglit, U.S. Pat. No. 5,734,362 in view of Hannah et al., U.S. Pat. No. 5,568,192 and further in view of Music, U.S. Pat. No. 5,739,861.

Considering claim 11, Eglit discloses the following claimed subject matter;

- a) the claimed processor is met by item 8, fig.2;
- c) the claimed main memory is met by item 12, fig.2;
- d) the claimed system controller is met by item 22, fig.2
- e) the claimed graphics controller is met by item 24, fig.2;
- f) the claimed video source is met by item 8 and 12, fig. 2;
- g) the claimed video output capable of connecting to a video display device is met by item 40, fig.2;

Expect for;

- b) the claimed bus.
- h) the claimed processor that applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output.

Regarding b), Eglit doesn't disclose a bus system, however would have been obvious to include in the reference given that the invention is "provided in the context of Super Video Graphics Array (SVGA) graphics controller card built according to the Video Graphics Array (VGA) standard to enable host computer to provide graphic presentation of data on an LCD

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display.” (See col. 4, lines 12-15). Generally, SVGA or VGA graphics controller cards are well known in the art to use a bus system and hook to a PCI or similar bus or interface.

Therefore, it would have been obvious to those skilled in the art at the time the invention was made to readily recognize that a bus system would have been obvious to include in the reference of Eglit and modify the system of Eglit accordingly, because bus and interface systems are well known in the art.

Regarding h), Eglit discloses a color space converter 36 that converts YUV data to RGB data. *Col 1 does!* ~~Eglit doesn't specifically disclose gamma correction.~~ However, it is well known in the art to have a process of gamma correction either at the camera or at the receiver end to correct for the linear characteristics. Hanna discloses a gamma correction method to “match typical computer monitor gammas, as will be understood by those skilled in the art.” (See col.6, lines 30-31). Furthermore, Music discloses a differential order video encoding system that first converts the RGB values into digital YUV values (see col. 2, lines 48-50) and then gamma corrects (see col. 6, lines (4-7) using well known in the art techniques. Therefore, it would have been obvious to those skilled in the art at the time the invention was made to readily recognize the teachings of Hanna and Music and modify the system of Eglit to perform gamma correction, because although Eglit doesn't specifically disclose gamma correction, it's well known in the art to correct for the linear characteristics of the camera before the image is sent to the display.

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6.

***Response to Arguments***

**Applicant's Argument**

A) Hannah also discusses a variety of digital signal image processing including gamma correction, but “teaches that this conversion must be performed in the RGB color space”

B) The cited reference does not teach, for example, “a digital processor employing a corrective algorithm that applies gamma correction to the digital YUV signal” as claimed in claim 1, the claims as amended are distinct from the cited reference.

**Examiner's Response**

A) YUV color space is merely another color space one chooses for gamma correction whereas Hannah et al. chose to utilize the RGB color space. Another person might choose another color space such as YcrCb. The Applicant has not demonstrated why choosing YUV color space is an advantage distinguishing the usage of RGB color space by the prior art reference (Hannah et al.).

This is merely a design choice. Thus, this particular argument is considered not persuasive.

B) It is well known in the art that computers use programming algorithms to process data or as in this case to perform color corrections including gamma correction. Hannah discloses that the computer's processor 403 processes the color data and applies gamma correction in the digital domain since the data has been digitized by the A/D converter 412 in circuit 401 as can be seen in Fig.5 and 6. Thus, the argument is considered not persuasive.

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*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Paulos Natnael** whose telephone number is **(703) 305-0019**. The examiner can normally be reached on **Monday through Thursday** from **7:00 a.m. to 4:00 p.m. (Est)**. The examiner can also be reached on alternate **Fridays**.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Peng**, can be reached on **(703) 305-4702**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is **(703) 305-3900**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-6306, (for formal communications intended for entry)

**or:**


(703) 308-6296 (for informal or draft communications, please label "PROPOSED" OR "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A. Sixth Floor  
(Receptionist).

**Paulos M. Natnael**

August 7, 2000

*pmn*

  
**MICHAEL LEE**  
PRIMARY EXAMINER